File #	Original File Name
1	PAC2001_SMMT_M-M_HYGRO_20010814D18_V1.csv

Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Sampling Interval As Reported in Main Table	Sampling Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name
NARSTO 2001/10/31 (2.213)	Mozurkewich ; Dr. Michael	Centre for Atmospheric Chemistry, York University	Part_Hygroscopicity ; Measurement of Hygroscopic properties of aerosol using a Tandem DifferentialMobility Analyzer	Variable interval	Same as sampling interval	1	YORKU	York University

Data Usage Acknowledgement	Study Or Network Acronym	Study Or Network Name	Country Code	State Or Province Code	Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation
Dr. Michael Mozurkwich, Centre for Atmospheric Chemistry, York University, rm. 006 Steacie ScienceBldg, 4700 Keele Street, Toronto, Ontario, MM3J 1P3, CANADA , mozurkew@yorku.ca	PAC2001	Pacific 2001	CA (CANADA)	BC	Dr. Michael Mozurkwich, Centre for Atmospheric Chemistry, York University, rm. 006 Steacie ScienceBldg, 4700 Keele Street, Toronto, Ontario, MM3J 1P3, CANADA , mozurkew@yorku.ca	Akililu ; Yayne-abeba	Centre for Atmospheric Chemistry, York University

Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File	Companion File Name format And Version	Date This File Generated archive Version Number	Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values	Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name	Table Focus
Yayne-abeba Aklilu, Centre for Atmospheric Chemistry, York University	2002-12-16	Excel/2000	None ; Not applicable	2004-10-15 ; 1	No zero values or negative values appear in the data in this file	Not applicable						Part_Hygroscopicity	Surface--fixed

Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
PC01CABCSMMT	Sumas	BC	49.05166	-122.24666	3.0	310.0	Residential	Rural	2001/08/14	2001/08/31			.

NARSTO Standard Flags

Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
	Historical data that have not been assessed or validated
M1	Missing value because no value is available
	Missing value because no value is available
	Missing value because no value is available
M2	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
	Missing value because invalidated by data originator
V0	Valid value
	Valid value
	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
	Valid estimated value
	Valid estimated value
V3	Valid interpolated value
	Valid interpolated value
	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)

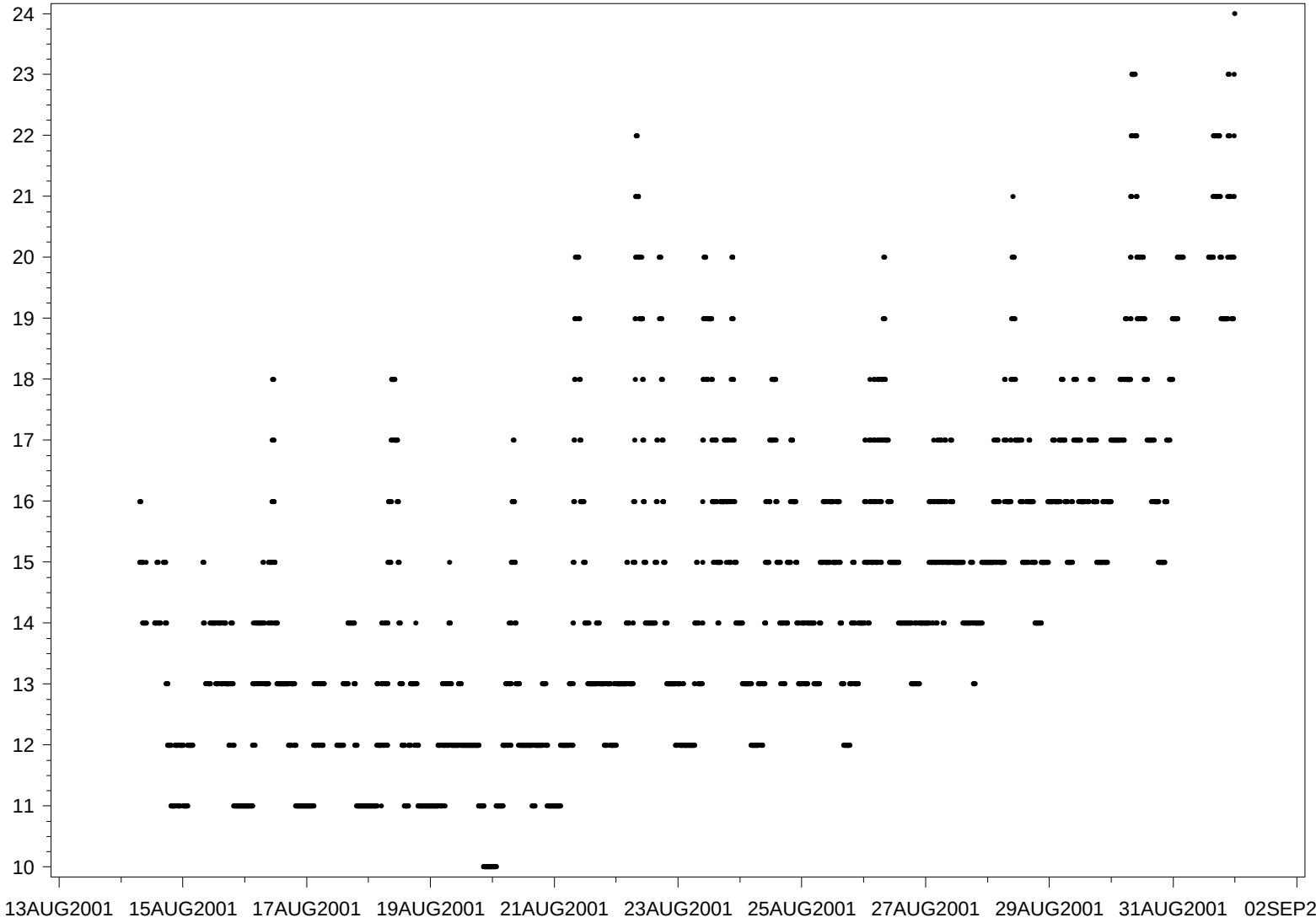
NARSTO Standard Flags

Flag: NARSTO	Description
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL
	Valid value but set equal to the detection limit (DL) because the measured value was below the DL

NAtChem Time Series Plot

Site ID: **PC01CABCSMMT** Variable name: **Humidity: relative (sampling humidity control)** Units: **%** Basis: **DMA 1** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Other** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Nafion dryer** Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3**
Instrument name and model number: **Viasala Humitter 50Y relative humidity_ DMA 1** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **583**
Minimum: **10**
25th Percentile: **12**
Median: **14**
Mean: **14.248**
75th Percentile: **16**
Maximum: **24**
Stnd Dev.: **2.540**

NARSTO Flags

Flag Symbol Count

M1: **583**

V0: ● **7,033**

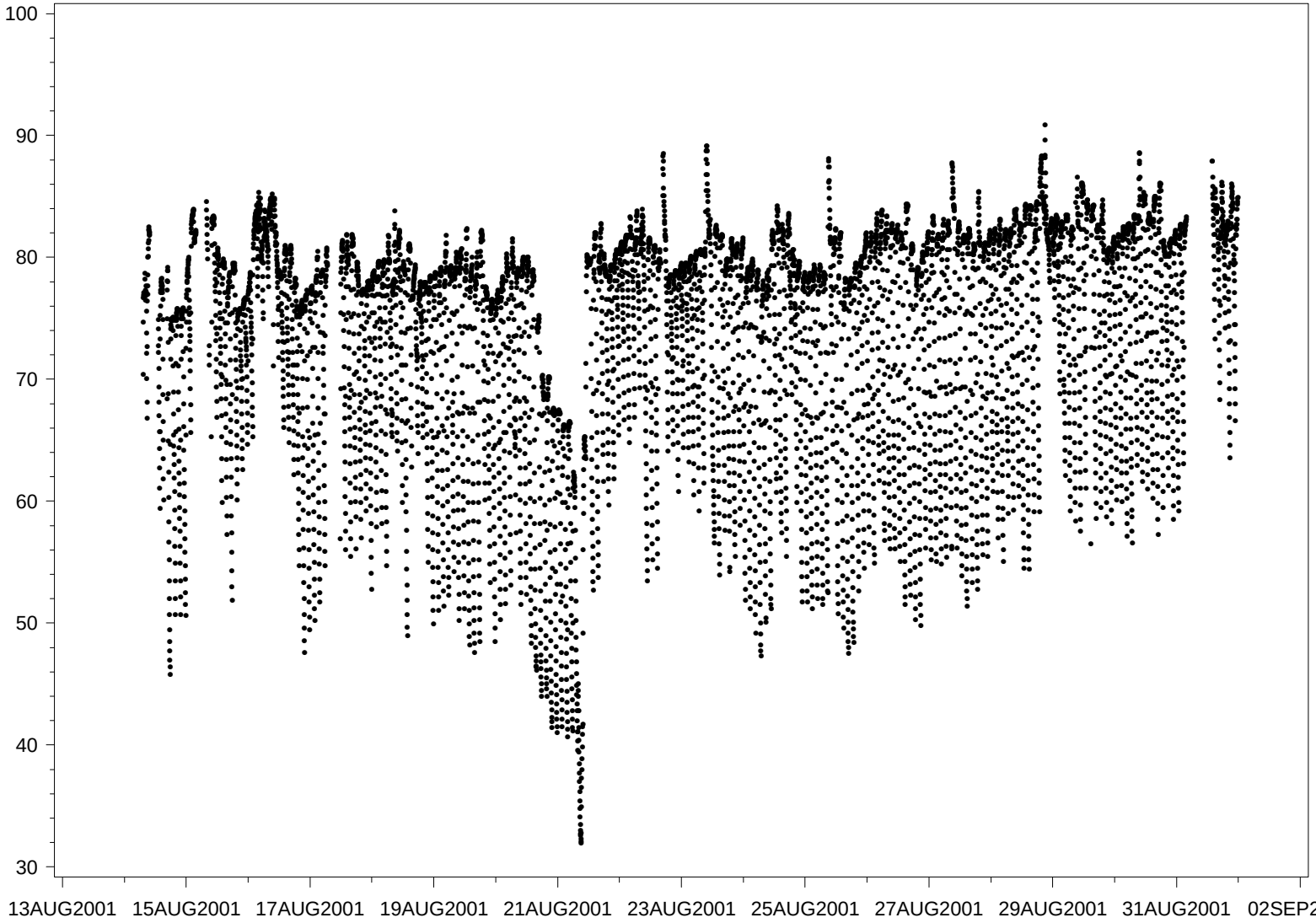
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Humidity: relative (sampling humidity control)** Units: **%** Basis: **DMA 2** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Other** Inlet type: **Open sampling line**
Sampling humidity or temperature control: **Humidification** Volume standardization: **Ambient temperature and pressure**
Sampling Height above ground (m): **3** Instrument name and model number: **Viasala Humitter 50Y relative humidity_DMA 2**
Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **583**
Minimum: **32**
25th Percentile: **66.8**
Median: **76.8**
Mean: **73.072**
75th Percentile: **80.5**
Maximum: **90.9**
Stnd Dev.: **9.726**

NARSTO Flags

Flag Symbol Count

M1: **583**
V0: ● **7,033**

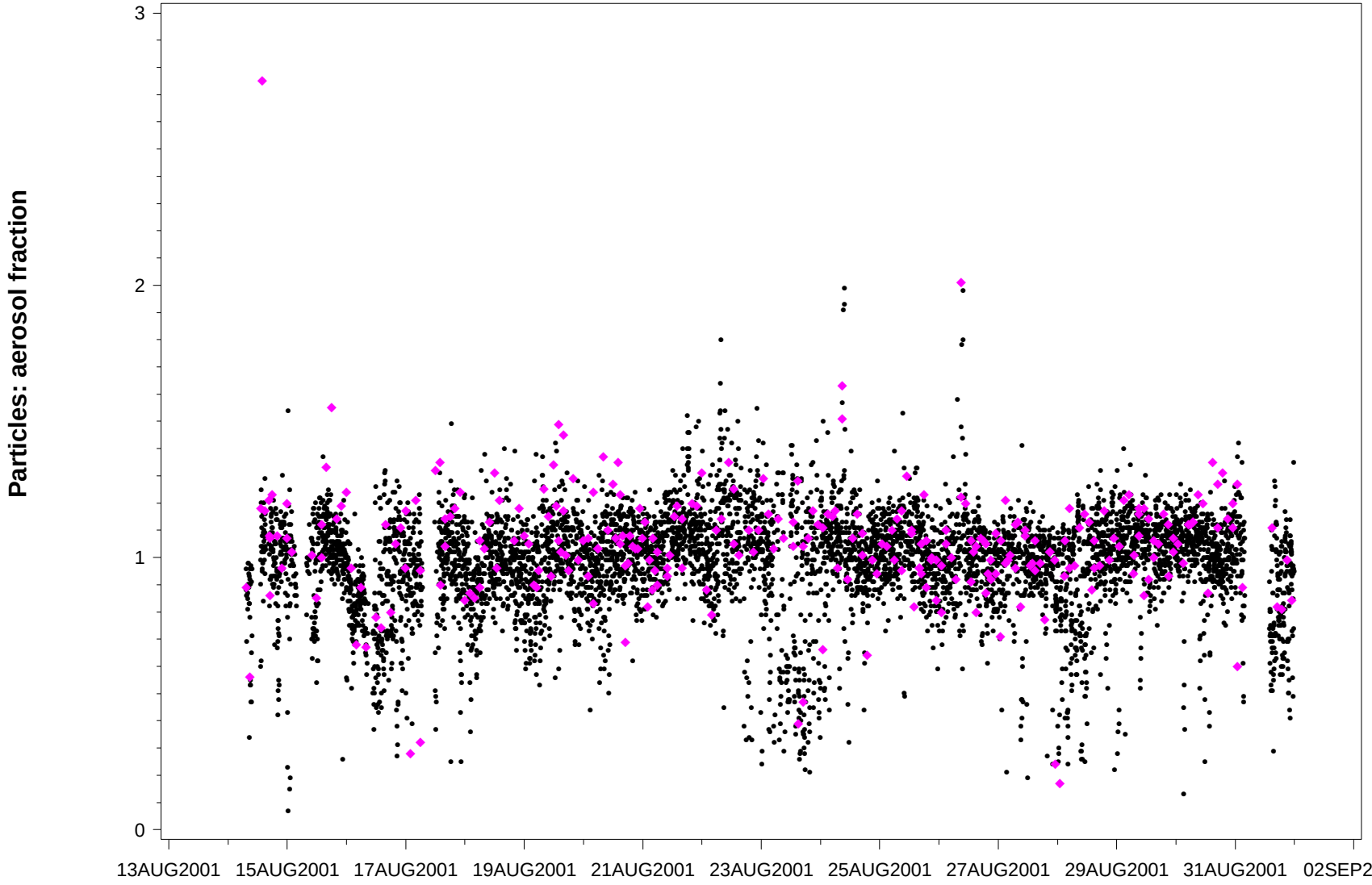
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: aerosol fraction** Basis: **Peak #1** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **1,034**
Minimum: **0.07**
25th Percentile: **0.91**
Median: **1.01**
Mean: **0.984**
75th Percentile: **1.09**
Maximum: **2.75**
Stnd Dev.: **0.185**

NARSTO Flags

Flag Symbol	Count
M1:	**582**
M2:	**452**
V0: ●	**6,293**
V4: ◆	**289**

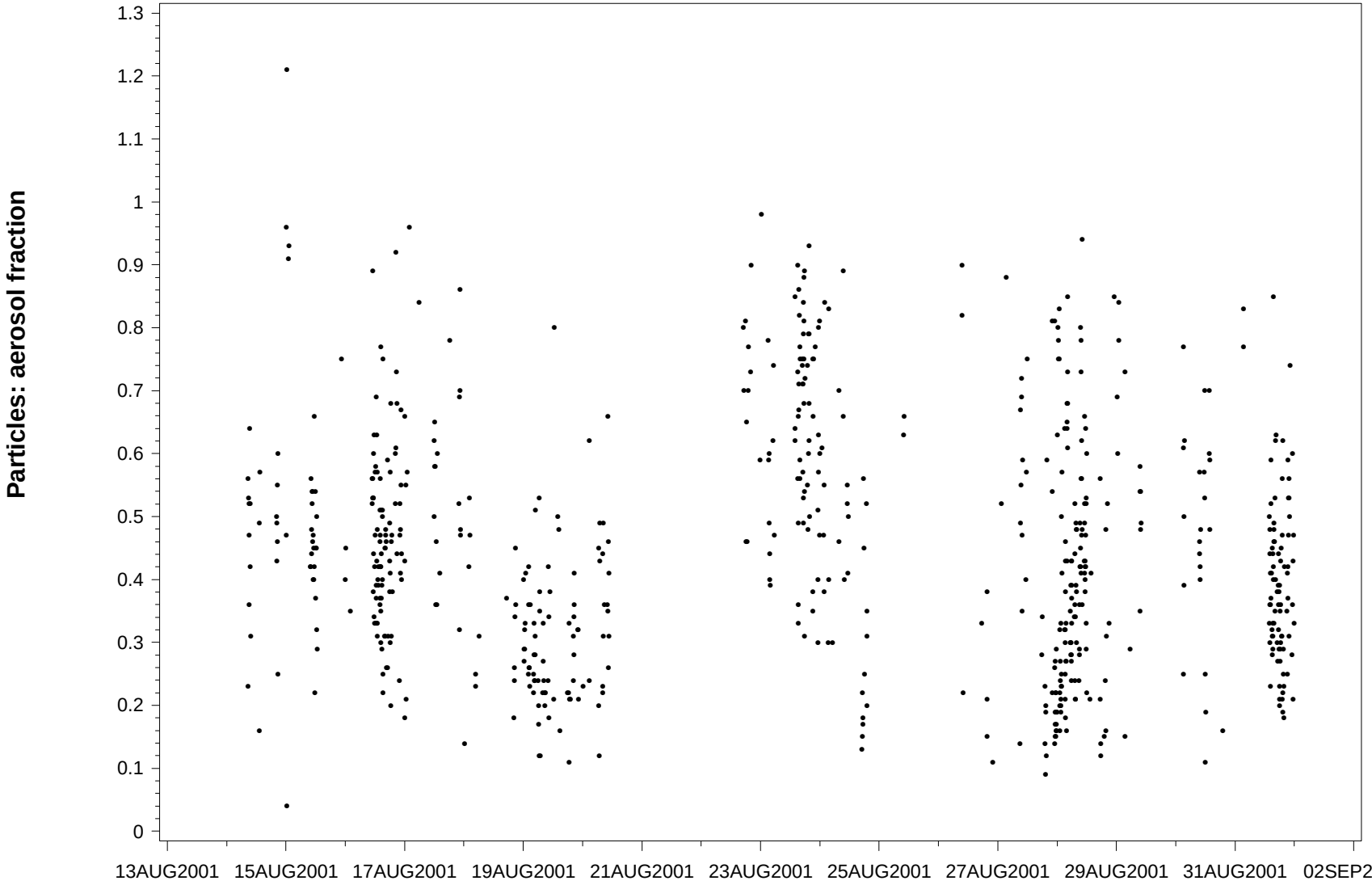
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: aerosol fraction** Basis: **Peak #2** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **6,932**
Minimum: **0.04**
25th Percentile: **0.3**
Median: **0.42**
Mean: **0.446**
75th Percentile: **0.56**
Maximum: **1.21**
Stnd Dev.: **0.194**

NARSTO Flags

Flag Symbol Count

M1: **6,932**

V0: ● **684**

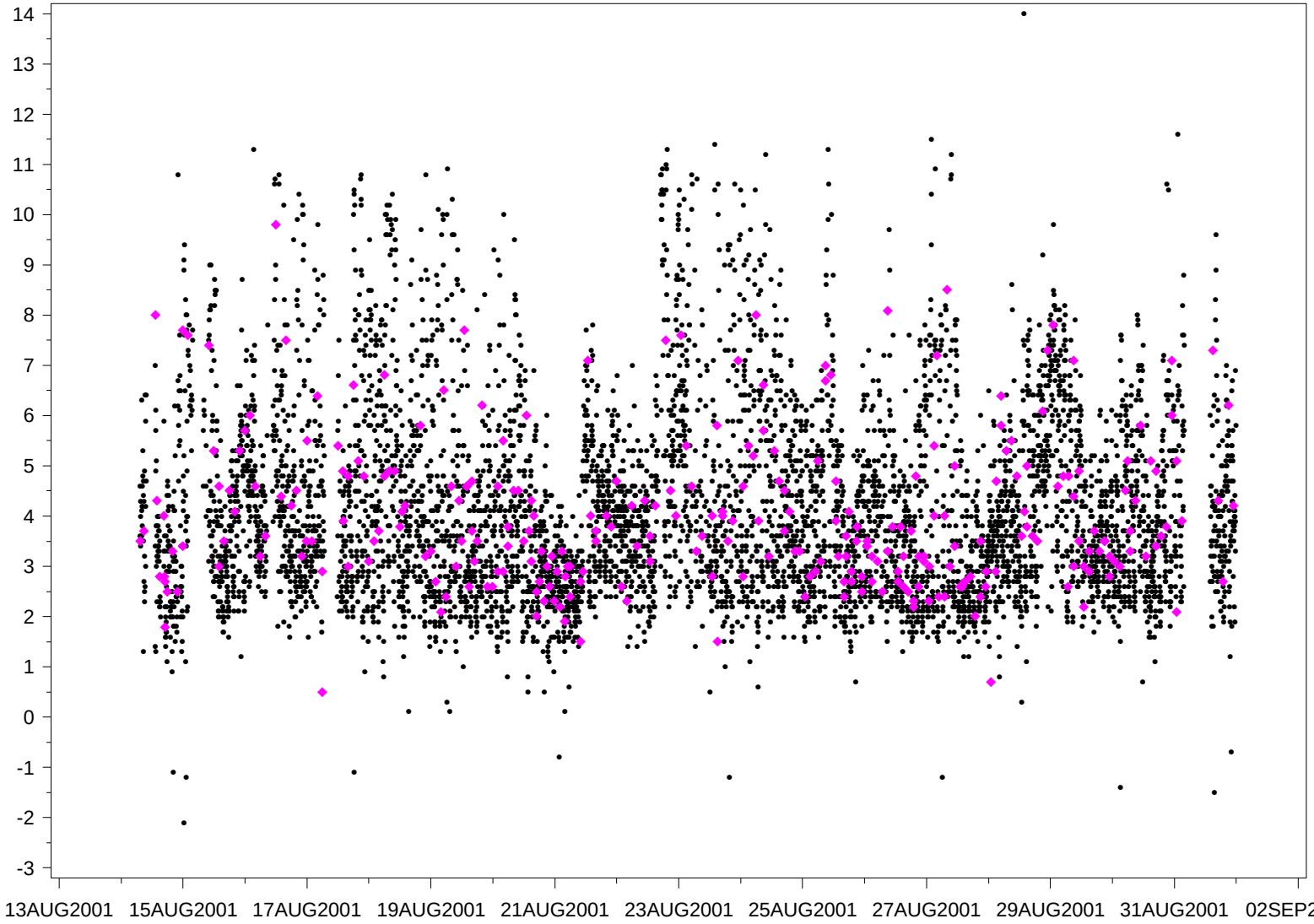
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot 21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: distribution spread factor** Units: **%** Basis: **Peak #1** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **1,034**
Minimum: **-2.1**
25th Percentile: **2.8**
Median: **3.7**
Mean: **4.138**
75th Percentile: **5.1**
Maximum: **14**
Stnd Dev.: **1.856**

NARSTO Flags

Flag Symbol Count

M1:		**582**
M2:		**452**
V0:	●	**6,293**
V4:	◆	**289**

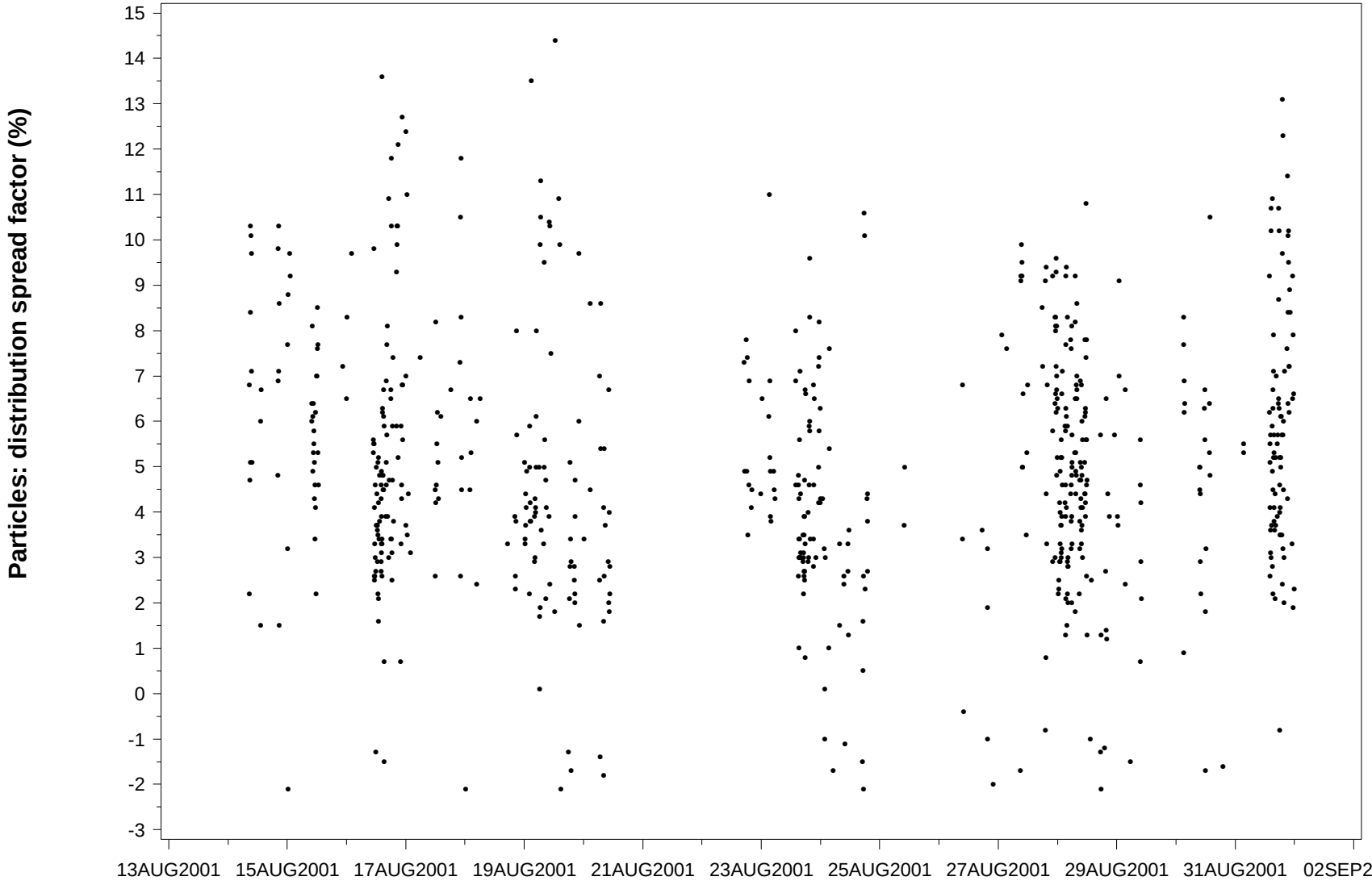
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: distribution spread factor** Units: **%** Basis: **Peak #2** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **6,932**
Minimum: **-2.1**
25th Percentile: **3.25**
Median: **4.7**
Mean: **5.001**
75th Percentile: **6.65**
Maximum: **14.4**
Stnd Dev.: **2.788**

NARSTO Flags

Flag Symbol Count

M1: **6,932**

V0: ● **684**

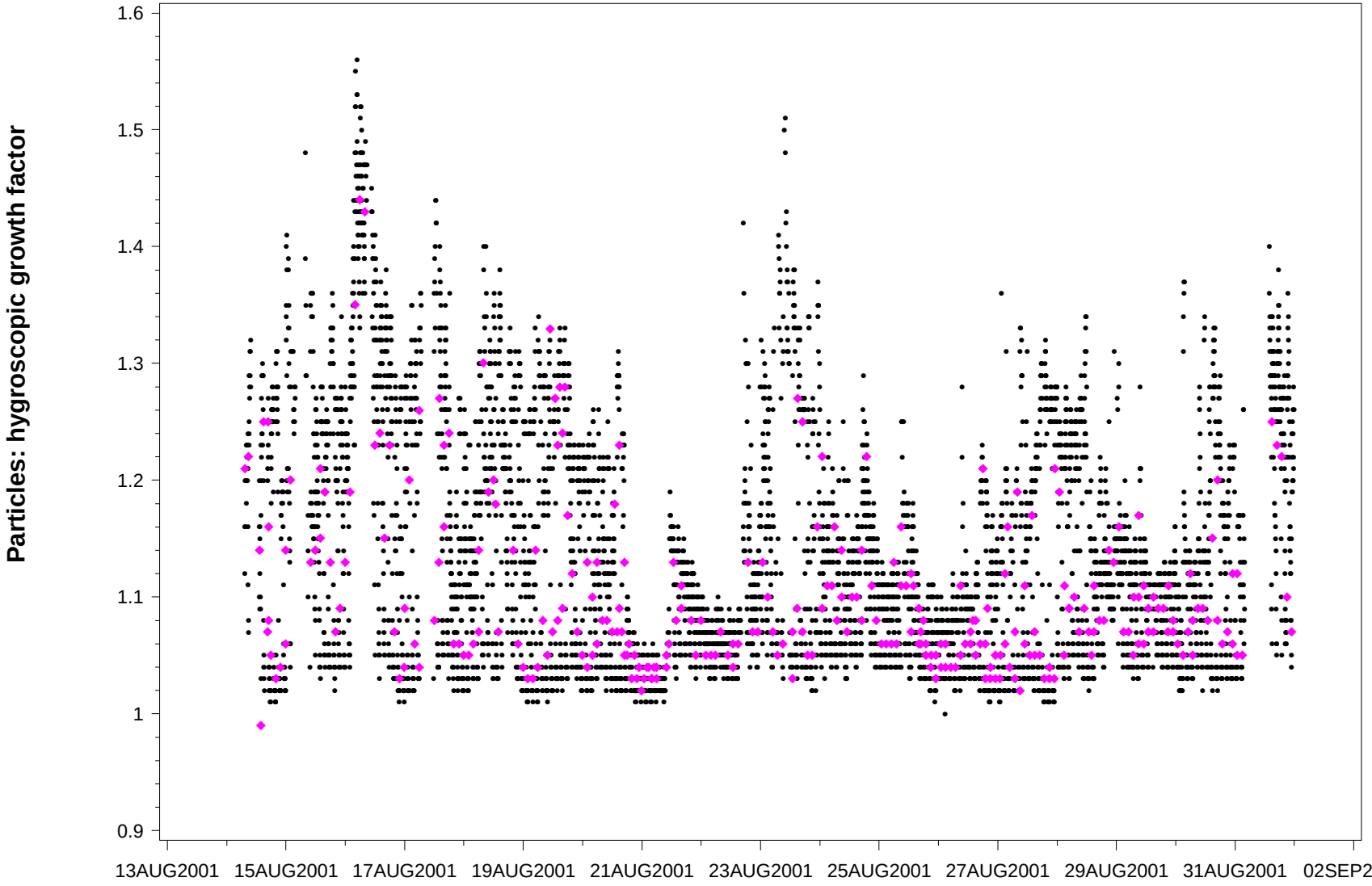
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot 21MAR2005

Site ID: **PC01CABCSMMT** Variable name: **Particles: hygroscopic growth factor** Basis: **Peak #1** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **1,034**
Minimum: **0.99**
25th Percentile: **1.05**
Median: **1.1**
Mean: **1.131**
75th Percentile: **1.2**
Maximum: **1.56**
Stnd Dev.: **0.100**

NARSTO Flags

Flag Symbol Count

M1:		**582**
M2:		**452**
V0:	●	**6,293**
V4:	◆	**289**

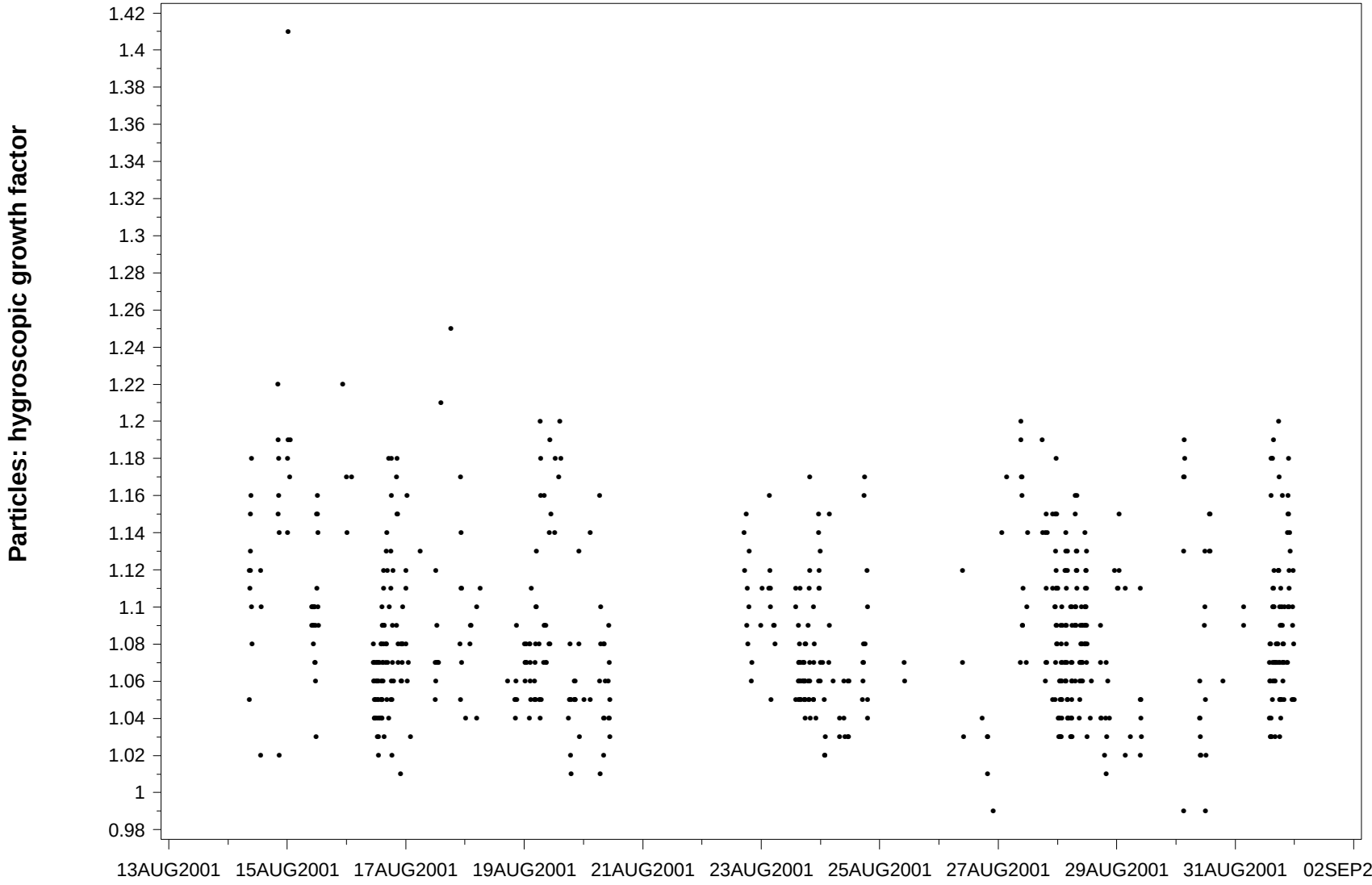
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: hygroscopic growth factor** Basis: **Peak #2** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **6,932**
Minimum: **0.99**
25th Percentile: **1.05**
Median: **1.08**
Mean: **1.086**
75th Percentile: **1.11**
Maximum: **1.41**
Stnd Dev.: **0.045**

NARSTO Flags

Flag Symbol Count

M1: **6,932**

V0: ● **684**

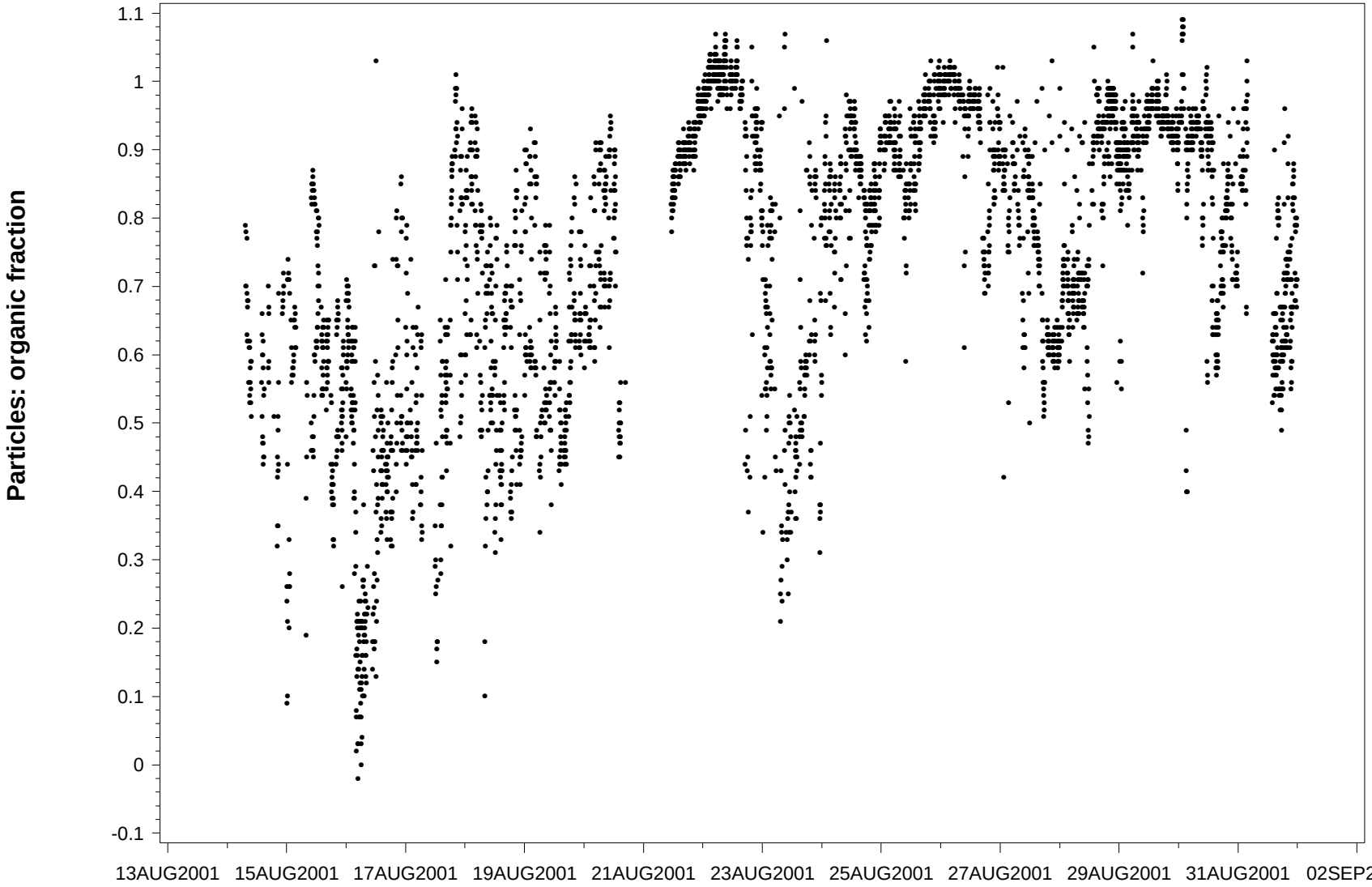
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: organic fraction** Basis: **Peak #1** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **4,048**
Minimum: **-0.02**
25th Percentile: **0.61**
Median: **0.81**
Mean: **0.752**
75th Percentile: **0.93**
Maximum: **1.09**
Stnd Dev.: **0.209**

NARSTO Flags

Flag Symbol Count

M1: **4,048**

V0: ● **3,568**

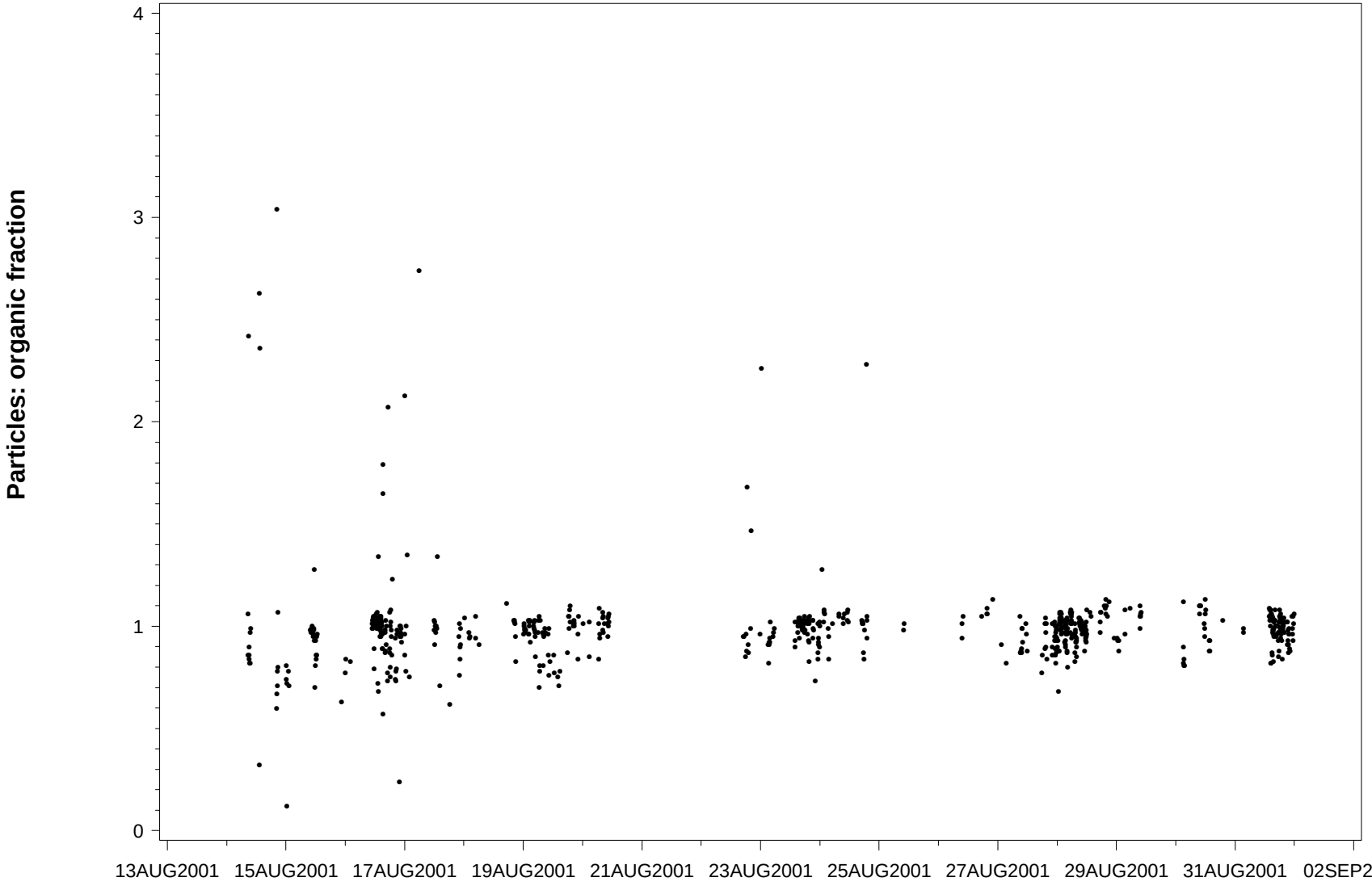
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot **21MAR2005**

Site ID: **PC01CABCSMMT** Variable name: **Particles: organic fraction** Basis: **Peak #2** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Inlet type: **Open sampling line**
Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **6,932**
Minimum: **0.12**
25th Percentile: **0.93**
Median: **0.99**
Mean: **0.989**
75th Percentile: **1.03**
Maximum: **3.04**
Stnd Dev.: **0.208**

NARSTO Flags

Flag Symbol	Count
M1:	**6,932**
V0: ●	**684**

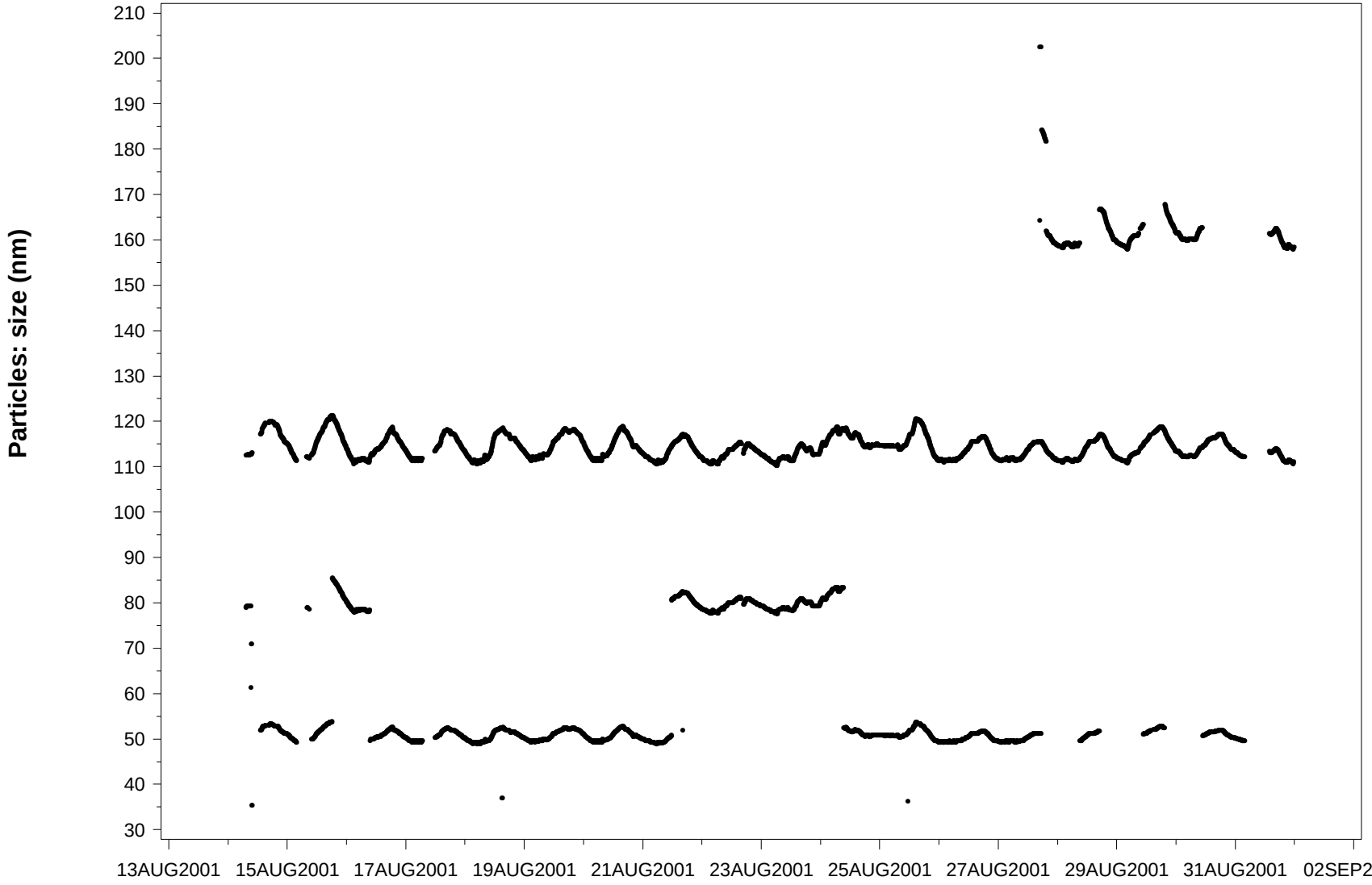
Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1

NAtChem Time Series Plot

Site ID: **PC01CABCSMMT** Variable name: **Particles: size** Units: **nm** Basis: **Dry** Sampling interval: **Variable interval**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Field sampling or measurement principle: **DMA**
Inlet type: **Open sampling line** Volume standardization: **Ambient temperature and pressure** Sampling Height above ground (m): **3**
Instrument name and model number: **DMA TSI 3071** Measurement principal investigator: **Mozurkewich**

Site Name:**Sumas, British Columbia** Latitude:**49.05166 deg.** Longitude:**-122.24666 deg.** Start Date:**2001-08-14** End Date:**2001-08-31**



Statistics
Number of obs: **7,616**
Number of missing: **583**
Minimum: **35.3**
25th Percentile: **51.9**
Median: **111.6**
Mean: **93.970**
75th Percentile: **115**
Maximum: **202.6**
Stnd Dev.: **34.095**

NARSTO Flags

Flag Symbol Count

M1: **583**
V0: ● **7,033**

Time Zone: PDT

File Name: NATCHEM_PAC2001_SMMT_M-M_HYGRO_20010814D18_V1